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V Kumar, A Bugucov, M Coutinho, ... - Proceedings of the 7th ... 1999 - portal.acm.org

... Their common element is the need to help a group develop and maintain their understanding ...

In certain applications, the registration of incidents or events may play an important role in ... The sizes of the blue circles are proportional to the number of documents found referencing ...

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J Komrzk, ... - Milton Keynes, The Open University, 2001 - komzak.web2.cz

... Hard copy maps, aerial photographs, remotely sensed images, reports, survey documents usually serve as the ... it will be possible to work only with the intersection of relevant subtypes in ... according to long time observation of client behaviour and creation of groups - typical client ...

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J Komrzk, ... - 2001 - CiteSeer

... The spatial nature of data is important in geographic and spatial information systems. ... Next possible group of analysis is provided by expert systems or system for support of decision making. ... The application displays documents downloaded from different servers. ...

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C Walters, ... - Journal of the American Society for ... 2003 - Wiley Online Library

... Geo-referenced Information Processing System) is a system that extracts geographical index terms from documents (Woodruff and ... for North American readers but we determined that this would not likely be relevant in a ... Finally, the third group had sites with errors in the URL. ...

[Cited by 10](#) - [Related articles](#) - [All 3 versions](#)**[book] GIS and public health**

EK Cromley, ... - 2002 - books.google.com

... practical concerns, the authors cut straight through the jargon to emphasize relevant applications in ... 267 Incorporating Normative Models of Facility Location and Service Delivery into GIS 279

Spatial ... Census identifiers for tracts, block groups, and blocks are unique 90 onh in the ...

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Y Morimoto, M Aono, ME Houle, ... - Applications and the ... 2003 - ieeexplore.ieee.org

... wt in the j-th document dj and di is the num-ber of documents in which the ... clustering method based on text data drawn from web pages should take into account the following ... As both considerations are equally important, these proportions should be accounted for separately. ...

[Cited by 13](#) - [Related articles](#) - [All 3 versions](#)**Data analysis for a multimedia library**

A Hauptmann, R Jin, ... - Text and Speech-Triggered Information ... 2003 - Springer

... Under the heading of "grouping", we would like to recognize the text flow on a ... Page formatting can be important, as newspapers may have multiple articles on one page ... the TREC evaluations, experiments have shown that information retrieval on documents recognized through ...

[Related articles](#) - [All 3 versions](#)**GIS and disease**

EK Cromley, ... - Annual Review of Public Health, 2003 - annualreviews.org

... science, social science, and geographic information science, conference proceedings, government documents from all ... with asthma in 1993 were compared to a random control group of children ...

For most GIS applications, these spatial units are not relevant to the geographical ...

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W Craig, T Harris, ... - Report of a Specialized Meeting Held Under ... 1999 - CiteSeer

... Maine, it was proposed that the idea of PPGIS should be incorporated into the new ... As result, a core planning group and co-leaders was established and a proposal to ... All participants recognized that this initiative was important for understanding 'geographies of the information ...

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E Höppler, ... - Proc. of the ICA Comm. on Mountain ... 2002 - CiteSeer

... **diverse documents** and field survey ... wild goat species of the alpine elevation belt (Capra ibex L. in the Alps) it has been shown, that insolation (also via its influence on snow depletion) is an important factor to me ... **conversion of radiance values into brightness temperature values ...**

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# Giuseppe Pozzi, Letizia Tanca and Luca Tosi Politecnico di Milano, Italy

F. Schuster, VDA AlbertoBentini, ... Web-enabled systems ... , 2003 - books.google.com  
... **access demands** can be supported by the DEAFIN system towards a variety of **user groups** ... **system**, **apto manage** and provide access to all the **regional relevant** information in ... to external DBMSs, • the system should be able to handle and generate XML documents, • the system ...

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SCDC... PUBLIC HEALTH 2000 - Citeseer  
... Data collected through NHANES are vitally important and have informed policy and research in many ... and county of residence; year of death; race (white, black, other); sex; age **group** at death ... is composed of over 450 individual Landsat 7 satellite scenes mosaicked into a single ...

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J.G. Lynn ... - 1995 - books.google.com

... Preface The Mapping Sciences Series of books was conceived to serve important needs in ... These three **documents** focused on remote sensor and GIS technologies for evaluation of riverine ... Conclusions 227 Chapter 16 Incorporation of Real-Time Environmental Data Into a GIS ...

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GIS Developing Regional ... 2000 - greatvalley.org  
... 1999.) All of the issues identified by residents as the most important matters facing ... Land Systems **Group**, 395 Del Monte Center #150, Monterey, California 93940, 831-633-6445 or 831 ... **GIS** Advisory Board was organized to conduct the study process, to review **documents**, and to ...

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SI Gershman ... 1997 - DTIC Document

... Where material from **documents** designated for limited distribution is quoted, permission has been ... well documented, yet difficult to explain after taking into account important confounders such ... They were categorized by gender and five-year age **groups** for each Massachusetts ...

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... 33 Figure 3.1 Three main forest management **groups** in the study area..... 35 ... Forest management must take into account the small scale (Sachs et al. 1998). More and ... **relevant** in all situations (USGS Biological Resources Division 1999). The species that ...

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... Billions of gallons of fresh water continually flow from the Kissimmee River and Lake Okeechobee into the Everglades. ... short period relative to geologic time frames. It is also important to note that the increased population, largely comprising ... These **groups** are ...

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... Books from ESRI Press are available to resellers worldwide through Independent Publishers **Group** (IPG ... Chapters Getting data into ArcView GIS 8-1 Understanding data sources 8-2 Adding ... The systems do differ in a number of important ways: how they link geographic locations ...

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... In Spatial Analysis within GIS A Variable Resolution Approach to **Cluster** Discovery in ... Computer-Aided Geometric Design Solving Geometric Constraints Invariant Modulo the Similarity **Group** ... Seed, DER Clark, R. Ocone, XY Yang Partitioning Polygons into Tree Monotone ...

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K GinzB ... 1994 - Wiley Online Library

... The third **group** of chapters, 13, 14, 15 and 18 may be described as ... it is important to define the nature of good results and the methods used to ... more esoterically, the transformation of Mackness's rose diagrams describing a map's components into "thermometers" representing ...

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TW Sanchez, N Bains, ... - Transportation Northwest Regional ... 2002 - transnw.org  
... Thomas W. Sanchez Center for Urban Studies, Transportation Research Group Portland State University, Portland ... areas into the suburbs, essentially reversing the traditional public transportation patterns. ... GIS is an important technology that is increasingly being used to support ...  
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E Schwab, 2002 - rural.at  
... Furthermore, you would have to do that by hand, by fetching and navigating Web documents, copying the price ... At the Institute of Information Systems, Database and Artificial Intelligence Group on the Vienna University of ... Lixto translates relevant parts of Web pages into XML. ...  
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CA Quiroga, ... Transportation Research Part C: Emerging ... 1998 - Elsevier  
... It documents the data collection, data reduction, and data reporting procedures, as well as ... For discussion purposes, these techniques can be grouped into two categories: roadside techniques and ... This is particularly important if there are interchanges or intersections along the ...  
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PD Cappellini - US Patent App, 20.033.014,266, 2002 - freepatentsonline.com  
... [0086] Transport Path Attributes—A group of attributes ... total, or partial part of the route that has been input as a planned itinerary by the service provider into the system. ... 0105] Generation (G)—An attribute used to describe the vectors, waypoints or waypoint attributes relevant to a ...  
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M Monnerette - Bringing geographical information systems into ... 2000 - books.google.com  
... In organizations, it often becomes embedded not only in documents or repositories but also in ... In addition to data availability, copyright, price, and data format are important issues to consider ... The purpose of this group is to help users and suppliers to implement the new ...  
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R Batta - 1999 - books.google.com  
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[Experiences with the use of supply chain management software in education](#)  
A Campbell, J Goentzel, ... Production and ... 2000 - Wiley Online Library  
... One class member from each group worked on the project during the next quarter to get the ... Appendices C and D). The data sets for the case studies are Microsoft Excel documents and do ... vehicle, and driver (if any) were involved in the most recent event and relevant volumes. ...  
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D Osborne, ... 2003 - books.google.com  
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JE Dobson, ... 1995 - ocr.noaa.gov  
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D Martin - 1996 - books.google.com  
... Many of the concepts and principles introduced here are relevant to all GIS users, but the ... data at conventional geographic scales of measurement Means of linking items of attribute information into some spatial ... National Health Service (UK) National Joint Utilities Group (UK) xix ...  
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GD Garson, ... 1992 - books.google.com  
... The rest of the agency will be very happy to know that the group is involved in the new technology, but equally ... In particular, it is important in mapping that common borders be maintained so that "slivers" do not appear (small gaps or ... Features are organized into layers in a GIS. ...

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**[BOOK] Smart growth for Tennessee towns and counties: A process guide**

[PDF from uk.edu](#)

MH English, JH Perutz ... - 1999 - [eric.ed.gov](#)

... The growth plan must include, at a minimum, **documents** describing municipal corporate limits as well as urban growth boundaries ... In addition, however, others may or should play an important role. ... (5) The cost of the process may be covered by fees charged to member **groups**. ...

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**Real-time insurance policy underwriting and risk management**

SC Kumar, DH Dymally ... - US Patent App ... - 2003 - [freepatentsonline.com](#)

... takes considerable time for the **GIS** operator to provide a list of **relevant** existing policies ... data (eg, converting Tagged Image File Format (TIFF) to Joint Photographic Expert Group (JPEG) format ... Although not shown, other types of data may also be input into the enterprise spatial ...

[Cited by 1](#)

**The State of Government Cartography in 1998**

JL Morrison - Journal article by Joel L. Morrison; Cartography and ... - 1999 - [questia.com](#)

... Linux. **Documents**. The group has produced a RFC for integrating geographic support into VRML as well as a proposal for introducing double-precision floating point support to better represent geographic coordinates. Greg ...

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**The National Science Foundation National Center for Geographic Information and Analysis**

FA RONALD - International Journal of Geographical Information ... - 1987 - Taylor & Francis

... technology and examines it from the standpoint of technology and society will identify important obstacles to ... Divisions are in turn **grouped** into Directorates, of which there are seven ... of the Center's activities were similar to those contained in the Dobson **documents**, accompanied by ...

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CE Bowers - 2000 - DTIC Document

... goods or services 48 Entitled goods or services 57 Summary 58 Chapter 4: Application: Using **GIS** for locational ... Travel choice is equally important. ... long recognized as a planning consideration, the concept of accessibility has rarely been translated into performance measures ...

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... Field data collected by community-based **groups** are incorporated into the City's database to ... information public, creating data integrity through feedback loops, and generating important data-sharing ... Talen, "Bottom-Up GIS: A New Tool for Individual and Group Expression in ...

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... Humanities in Australia into the 21st Century, 3 vols, Prepared by a Reference Group for the ... primarily by the desire of the researcher to push an unasked question, an important issue or ... careers hunched for hours at a time over their accumulation of books and **documents** in the ...

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SI Auringhaus - 1994 - [books.google.com](#)

... These written **documents**, developed in partial collaboration with Robert Austin, served as the base for ... absorbed and changed into other forms of energy; processes involving energy are important in satellite ... acronym word formed from first (or other) letters of a **grouping** of words. ...

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... con- tributed greatly to this area of early, manual GIS research and was important in introducing further work in the use of ... Peucker and Chris- man (1975) conducted some of the earliest research into the ... GIS, one of the first 'topologically complete' GIS. A ...

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... Decision Quality Objectives (rather than Data Quality Objectives) should be developed that are related to the specific circumstances of a site and take into consideration potential risks, exposure routes, and concerns. Monitoring parameter lists should be **relevant** to the ...

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R Brand - 1998 - [books.google.com](#)

... from the Unit for Human Resources Information and Planning in the HSRC's **Group** Human Resources ... The study highlighted the important contribution of **GIS**, not only as a very useful ... by the incorporation of data-mining techniques (such as neural networks) **into** spatial analyses ...

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I am Walter Kraft. I'ma Traffic Engineer. I'm an ITS Engineer. I do planning. I do operations. I do manage-ment. I do integration. I want to see what is happening on the ...

W.H. Kraft - Remote sensing for transportation: products and ... 2003 - books.google.com

... Government agencies are the largest potential custo- mer **group**. ... I'm going to organize my comments **into** three areas ... have been a lot of improvement and a lot of progress over the last year in the **flow** area, but beyond the tech- nical advancements, even more important are the ...

Method, system, and program for an improved enterprise spatial system

TA Von Kaenel, DN Dymally .. : US Patent App. ..., 2003 - freepatentsonline.com

... 201 to contain the logic to convert and, possibly, combine raw spatially referenced data **into** viewable data ... 0022] Yet another problem is that Geographic Information Systems (**GIS**) require data ... same application need to be run, each working with a different set or **grouping** of data ...

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**Anonymous usage of location-based services through spatial and temporal cloaking**[\[PDF\] from pbs.edu](#)

M. Gruber, D. Grunwald, ... of the 1st international conference on ... 2003 - portal.acm.org  
 ... To be effective, the location anonymizer requires location-based services that are used with ... on  
 ... a Java server platform and evaluated them using automotive traffic simulations based on ... on  
 transportation network information at the city level in the Spatial Data Transfer Standard ...

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M. Ester, H.P. Kriegel, J. Sander, ... on Knowledge Discovery and Data, 1996 - asdl.org  
 ... from the US Geological Survey's Geographic Names Information System, together with their  
 location. ... Clustering algorithms are attractive for the task of class identification in spatial databases. ...  
 the clustering algorithm DBSCAN which relies on a density-based notion of ...

[Cited by 3224](#) - [Related articles](#) - [All 14 versions](#)**STING: A statistical information grid approach to spatial data mining**[\[PDF\] from psu.edu](#)

W. Wang, J. Yang, ... International Conference on Very Large Data Bases, 1997 - Citeseer  
 ... distance is chosen as the value of Eps and the resulting clustering quality is ... The distribution type  
 is still NORMAL based on the following: Since there are 210 points ... AND price RANGE (150000,  
 300000) WITH PERCENT (0.7, 1) AND AREA (100, ∞) AND LOCATION California ...

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J. Sander, M. Ester, H.P. Kriegel, ... Data Mining and Knowledge, 1998 - Springer  
 ... is possible, ie, performing a selection "on the fly" while clustering the database. ... the selection first  
 under certain circumstances because GDBSCAN can use existing spatial index structures ... define  
 density-connected sets analogously to the definition of density-based clusters in ...

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S. Shekholeslam, S. Chatterjee, ... The VLDB Journal, 2000 - Springer  
 ... WaveCluster: a wavelet-based clustering approach for spatial data ... All the grid-based approaches  
 for clustering spatial data suffer from the modifiable areal cell problem (MAUP) first addressed  
 by Openshaw in 1977, and Openshaw and Taylor in 1981 [Ope77, OT81]. ...

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J. Han, M. Kamber, ... Geographic Data Mining and Knowledge Discovery, ... 2001

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A. Dasgupta, ... Journal of the American Statistical Association, 1998 - JSTOR  
 ... practice; see Muise and Smith (1992). A similar problem that we also consider is to determine  
 the location of seismic ... 2. METHODOLOGY 2.1 Model-Based Clustering Banfield and Raftery  
 (1993) proposed a method for model-based clustering of d-dimensional data based on a ...

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S. Shekholeslam, S. Chatterjee, ... on Very Large Data Bases, 1998 - Citeseer  
 ... Let  $\delta_{ij} = (W_i, O_{ij}, \dots, v_d)$  denote a unit in the original feature space where  $v_i, 1 \leq i \leq d$   
 is the location of the unit on the axis  $X_i$  of the feature space. ... The label of each unit is determined  
 based on the labels of its neighboring units [Hor88]. ... Clustering Arbitrary Shapes ...

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V. Estivill-Castro, ... in Knowledge Discovery and Data Mining, 1998 - Springer

... M. Ester, H.P. Kriegel, S. Sander, and X. Xu. A density-based algorithm for discovering clusters  
 in large spatial databases with noise. ... Mining spatial data via clustering. Technical Report #5/97,  
 FIT, QUT, Brisbane 4000, Australia, 1997. ... Location-allocation for small computers. ...

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S. Shekhar, P. Zhang, Y. Huang, ... Data mining, Need, ... 2003 - spatial.cs.umn.edu  
 ... as shown in Figure 3.2(c). Other contingency matrices can be designed to model neighborhood  
 relationships based on distance ... studies of four important output patterns for spatial data mining:  
 predictive models, spatial outliers, spatial co-location rules, and spatial clustering ...

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**clustering**

A. Balaboi, ... - Environment and Planning ... 2002 - environmentandplanning.com  
 ... A knowledge-based approach to the theory of **spatial clustering** As we see it, a satisfactory theory of **spatial clustering** must be ... colocated but which are not available to a hypothetical single firm carrying out precisely the same activities, even at the same **location**, using the ...  
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**Robust distance-based clustering with applications to spatial data mining**

V Estivill-Castro, ... - Algorithms, 2001 - Springer  
 ... Since C and C differ on only one point, with appropriate structures for point **location**,  $O(n \log k)$  steps are sufficient to find  $\text{rep}(S)$ ,  $C$  for all  $S \subseteq S$  ( $\text{rep}(S)$ ,  $C$ ] is either unchanged or the new ... Robust Distance-Based Clustering with Applications to Spatial Data Mining 223 ...  
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V Estivill-Castro, AT Murray, ... of the International ICSC Symposium on ... 1997 - Citeseer  
 ... Our results open the possibility for even more competitive genetic search for medoid based **clustering**. 7 Acknowledgments ... Page 11. **Spatial Clustering for Data Mining with a GA** ... 1] G. Bianchi and R. Church. A non-binary encoded genetic algorithm for a facility **location** problem. ...  
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**Autocluster: Automatic clustering of point-data sets in the presence of obstacles**

V Estivill-Castro, ... - Temporal, Spatial, and Spatio-Temporal Data ... 2001 - Springer  
 ... includes the number of clusters that reside in P (note that some **clustering** methods are ... tion rather than providing it), extent, scatter and size of each cluster, **location in spatial** ... Type II information includes causal factors and potential explanations based on data in other layers ...  
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**Data clustering: a review**

AK Jain, MN Murty, ... - ACM computing surveys (CSUR), 1999 - portal.acm.org  
 ... The field of **spatial analysis** of point pat- terns [Ripley 1988] is also related to cluster ... A review of image segmentation by **clustering** was reported in Jain and Flynn [1996] ... Com- parisons of various combinatorial opti- mization schemes, based on experi- ments, have been reported ...  
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**DBRS: A density-based spatial clustering method with random sampling**

X Wang, ... - Advances in Knowledge Discovery and Data ... 2003 - Springer  
 ... Region growing is heavily based on not only the **location** of pixels but also the non-**spatial** attributes or 'a priori' knowledge [9 ... (We refer to each **spatial data** object in a dataset as a point.) In this paper, we introduce the problem of a-approximate density based **clustering**. ...  
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**BIRCH: an efficient data clustering method for very large databases**

T Zhang, R Ramakrishnan, ... - ACM SIGMOD Record, 1996 - portal.acm.org  
 ... Soj it is still unable to scale well with large N. **Clustering** has been recognized as a useful **spatial data** mining method recently. [NH94] presents ('L4BAN,\$' that is based on randomized search, and proposes that ('LARAN,\$ outperforms traditional **clustering** al- ...  
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J Han, K Koperski, ... - ACM SIGMOD Record, 1997 - portal.acm.org  
 ... The relational databases contain **spatial** information as well, such as the residence of a customer or the **location** of a ... Concept hierarchies can be created by users or domain experts, but also generated automatically based on value distribution or some **clustering** algorithms. ...  
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**Fast approximations for sums of distances, clustering and the Fermat-Weber problem\* 1**

P Bose, A Maheshwari, ... - Computational Geometry, 2003 - Elsevier  
 ... 7. Estivill-Castro and Houle, Robust distance-based clustering with applications to **spatial data** mining. Algorithmica 30 2 (2001), pp. 216–242. Full Text via CrossRef | View Record in Scopus | Cited By in Scopus (13). 8. RL Francis Facility Layout and **Location**: An Analytical ...  
[Cited by: 31](#) - [Related articles](#) - [All 5 versions](#)

**Constraint-based clustering in large databases**

A Tung, J Han, L Lakshmanan, ... - Database Theory—ICDT 2001, 2001 - Springer  
 ... **Clustering** methods can be categorized into partitioning methods [KR90, NH94], hierarchical methods [KR90] ... methods [EKX96], grid-based methods [WYM97, AGF98], and model-based methods [HaKa00] ... somewhat similar to the CC problem is the facility **location** problem ...  
[Cited by: 124](#) - [Related articles](#) - [Full Text](#) - [All 32 versions](#)

**Mining frequent neighboring class sets in spatial databases**

Y Matsuzaki, ... conference on Knowledge discovery and data mining, 2001 - portal.acm.org  
 ... for finding important **spatial** pattern called frequent neighboring class sets from **spatial** databases. ... sets are not just clusters that can be found by conventional **clustering** algo- rithms ... class sets can be utilized for many applications such as **location-based** services, development ...  
[Cited by: 33](#) - [Related articles](#) - [All 5 versions](#)

**Streaming data algorithms for high-quality clustering**[\(PDF\) from psu.edu](#)

L O'Callaghan, N Mishra, A Meyerson ... : Data Engineering, ..., 2002 - [ieeeexplore.ieee.org](#)  
 ... CG algorithm given in Sec-tion 3.2.1, except that CG solves the facility location variant which is more desirable since in practice one does not know the exact number of clusters k (and facility location allows as ... Other types of clustering include density-based methods, eg ...

[Cited by 111](#) - [Related articles](#) - [Bib. Data](#) - [All 21 versions](#)

**Spatial data mining: database primitives, algorithms and efficient DBMS support**[\(PDF\) from psu.edu](#)

M Ester, A Frommelt, HP Kriegel ... : Data Mining and Knowledge ..., 2000 - Springer  
 ... 195 Figure 1. Regions of pollution around a planned industrial plant (Bill, 1991). Figure 1 depicts a map used in the assessment of a possible location for a new industrial plant. ... 203 Figure 6. Illustration of a single scan clustering, using a distance based neighborhood. ...

[Cited by 103](#) - [Related articles](#) - [Bib. Data](#) - [All 16 versions](#)

**An updated bibliography of temporal, spatial, and spatio-temporal data mining research**

J Rodack, K Hornsby ... : Spatial, and Spatio-Temporal ..., 2001 - Springer  
 ... Fast Randomized Algorithms for Ro- bust Estimation of Location. In Proc. ... Estvill-Castro, V. and Lee, I. (2000). AUTOCCLUS-: Automatic Clustering of Point-Data Sets in the Presence of Obstacles. ... Discovering associations in spatial data-an efficient mediod based approach. ...

[Cited by 37](#) - [Related articles](#) - [All 7 versions](#)

**Second-order analysis of spatial clustering for inhomogeneous populations**

P.J Diggle ... : Biometrika, 1991 - JSTOR  
 ... 100 11 52 59 98 97 100 200 12 57 82 98 100 100 Our power study is based on 100 replicate simulations of events in A, the unit square. ... The location of each event is taken as the centroid of the post code of home address. ... suggests mild evidence of spatial clustering. ...

[Cited by 164](#) - [Related articles](#) - [All 3 versions](#)

**Model-based clustering, discriminant analysis, and density estimation**[\(PDF\) from psu.edu](#)

C Fraley ... : Journal of the American Statistical Association, 2002 - ASA  
 ... We give examples from medical diagnosis, minefi eld detection, cluster recovery from noisy data, and spatial density estimation. Finally, we mention limitations of the methodology and discuss recent developments in model-based clustering for non-Gaussian data, high ...

[Cited by 449](#) - [Related articles](#) - [Library Search](#) - [Bib. Data](#) - [All 51 versions](#)

**BIRCH: A new data clustering algorithm and its applications**[\(PDF\) from psu.edu](#)

T Zhang, B Barnakrishnan ... : Data Mining and Knowledge ..., 1997 - Springer  
 ... 2. Distance-Based Most data clustering algorithms in Statistics are distance-based approaches. ... Hence none of them can scale up linearly with stable quality. Data clustering has been recognized as a useful spatial data mining method recently. ...

[Cited by 276](#) - [Related articles](#) - [Bib. Data](#) - [All 17 versions](#)

**[PDF] Spatial disease clusters: detection and inference**[\(PDF\) from statcan.ca](#)

M Kulldorf ... : Statistics in medicine, 1995 - statcan.ca  
 ... In this paper, we present a method that detects the location of possible disease clusters in a population with ... Both have been applied to disease clustering. One approach uses a test statistic based on measuring distances between the disease cases while the other is based on ...

[Cited by 1500](#) - [Related articles](#) - [Bib. Data](#) - [All 8 versions](#)

**[BOOK] Geographic data mining and knowledge discovery**[\(PDF\) from utah.edu](#)

HJ Miller ... : 2001 - books.google.com  
 ... between 2-D image and feature space 183 7.10 Visualization of the clustering result for ... 8.12 CLIQUE: Determining potential region with dense units 224 8.13 Planning the location of ATMs ... 9.8 Finding outliers by the speed of motion 248 9.9 Discovering outliers based on speed ...

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**Data mining: An overview from a database perspective**[\(PDF\) from psu.edu](#)

MS Chen, J Han ... : data Engineering, IEEE Transactions ..., 1996 - [ieeeexplore.ieee.org](#)  
 ... databases, transaction databases, object- oriented databases, deductive databases, spatial data-bases, temporal ... charac- teristic rules, classification rules, discriminant rules, clustering, evolution, and ... un- derlying data mining approach into generalization- based mining, pattern ...

[Cited by 1602](#) - [Related articles](#) - [Library Search](#) - [Bib. Data](#) - [All 72 versions](#)

**Using a neural network and spatial clustering to predict the location of active sites in enzymes**[\(PDF\) from uconn.edu](#)

A Guttridge, GJ Bartlett ... : Journal of molecular biology, 2003 - Elsevier  
 ... Here, a neural network is trained to identify the catalytic residues found in enzymes, based on an ... spatial clustering of the highly scoring residues are then used to predict the location of the ... Spatial clustering of the network results provides a reliable way of finding likely active sites ...

[Cited by 121](#) - [Related articles](#) - [All 15 versions](#)

**[PDF] AMOEBA: Hierarchical clustering based on spatial proximity using Delaunay diagram**[\(PDF\) from psu.edu](#)

V Estvill-Castro ... : the 9th International Symposium on Spatial Data ..., 2000 - Griesener  
 ... of spatial entities is that they are correlated with each other in the sense of time, location, theme and ... Wang et al., 1997) and STING+ (Wang et al., 1999) also use a statistical information based on a ... These compact values can be used for clustering to draw a good approximation. ...



[Cited by 14](#) - [Related articles](#) - [View on HTML](#) - [All 2 versions](#)

**[PDF] X-means: Extending K-means with Efficient Estimation of the Number of Clusters**  
D Pelleg, ... - *ICML-2000*, 2000 - Citeseer  
... We first describe the naiveK-means algorithm for producing a clustering of the points in the ... In case a centroid location changes, a new element has to be inserted and it is ... It uses statistically-based criteria to make local decisions that maximize the model's posterior probability ...  
[Cited by 1071](#) - [Related articles](#) - [View on HTML](#) - [All 2 versions](#)

[\[PDF\] from psu.edu](#)

**Partition based spatial-merge join**  
JM Patel, ... - *ACM SIGMOD Record*, 1998 - portal.acm.org  
... The study also investigates the effect of clustering the join inputs. ... In [Ore86, OM88], Oreinstein proposes an approach based on approximate geometry, wherein the universe of the ... Each pixel, which is described by its spatial location, is transformed into a 1-dimensional domain ...  
[Cited by 113](#) - [Related articles](#) - [View on HTML](#) - [All 2 versions](#)

[\[PDF\] from del.ac.uk](#)

**[PDF] Integrated analysis of spatial data from multiple sources: using evidential reasoning and artificial neural network techniques for geological mapping**  
P Gong - *Photogrammetric Engineering and Remote Sensing*, 1996 - elsevier  
... Many clustering algorithms and the MLC can be applied only to data at ratio and interval measurement scales. ... Classification Based on Evidential Theory Let a vector  $X = (x_1, x_2, x_n)$  denote a set of observations or measurements made at a particular location. ...  
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[\[PDF\] from sls.ac.cn](#)

**Exploratory spatial data analysis techniques for examining urban crime**  
AT Murray, I McGuffee, JS Westerstam, ... - *British Journal of Criminology*, 2007 - CCJS  
... Information on the 99 police stations was provided by Queensland Police. Information on the location of the 82 fire stations was provided by Queensland Fire and Rescue Authority. ... FIG. 4 Property crimes and spatial features in Brisbane Page 11. Optimization-based Clustering ...  
[Cited by 46](#) - [Related articles](#) - [View on HTML](#) - [All 2 versions](#)

[\[PDF\] from curv.edu](#)

**Distributed data clustering can be efficient and exact**  
G Fomenko, ... - *ACM SIGKDD exploration's newsletter*, 2000 - portal.acm.org  
... Remove portions of the dataset over the poor connection to a central location for (parallel ... "K-Harmonic Means: A Spatial Clustering Algorithm with ... Algorithms using Sufficient Statistics for Efficient Parallel Speed-up: Demonstrated for Center-Based Data Clustering Algorithms," 4th ...  
[Cited by 63](#) - [Related articles](#) - [View on HTML](#)

[\[PDF\] from hp.com](#)

**[PDF] Clustering algorithms for spatial databases: A Survey**  
E Kolatrach - *PDF is available on the Web*, 2001 - Citeseer  
... In addition, spatial location, and implicit information about the location of an object, may be exactly the information that can be extracted through spatial data mining. [Fay96] ... 4.3 DBCLASD DBCLASD (Distribution Based Clustering of Large Spatial Databases) [XEK98], is ...  
[Cited by 16](#) - [Related articles](#) - [View on HTML](#) - [All 2 versions](#)

[\[PDF\] from psu.edu](#)

**Detecting graph-based spatial outliers: algorithms and applications (a summary of results)**  
S Shekhar, CT Lu, ... - *on Knowledge discovery and data*, ... 2001 - portal.acm.org  
... cost models for outlier detection queries, and compare underlying data storage and clustering methods that ... We are interested in discovering the location of stations whose measurements are inconsistent with those of their graph-based spatial neighbors and the ...  
[Cited by 104](#) - [Related articles](#) - [View on HTML](#)

[\[PDF\] from psu.edu](#)

**Hierarchical model-based clustering for large datasets**  
C Pebes - *Journal of Computational and Graphical Statistics*, 2001 - ASA  
... Section 2 reviews the general framework of model-based clustering. ... Section 4 uses the MST-HMCLUST-EM approach to analyze simulated data and two large, real datasets ... In the latter case, local smoothers are combined with this algorithm to integrate the spatial information in ...  
[Cited by 50](#) - [Related articles](#) - [View on HTML](#) - [All 10 versions](#)

[\[PDF\] from washington.edu](#)

**Knowledge-based image retrieval with spatial and temporal constructs**  
WW Chu, CC Hsu, AF Cardenas, ... - *Knowledge and Data*, ..., 1996 - ieeeexplore.ieee.org  
... These computed features will be classified automatically with clustering algorithms into Type Abstraction Hierarchies ... of the visual entities in the query are extracted and compared based on the ... descriptors, such as size and roundness for the shape category, location for the ...  
[Cited by 145](#) - [Related articles](#) - [View on HTML](#) - [All 11 versions](#)

**Local indicators of spatial association—LISA**  
J Anselin - *Geographical analysis*, 1995 - Wiley Online Library  
... is a simple sum over the subscript i, a local Gamma index for a location i may ... the data sources, see Anselin and O'Laughlin (1992). The suggestion of spatial clustering of similar ... (0.002) 6 These statistics are computed for a row-standardized spatial weights matrix based on first ...  
[Cited by 1013](#) - [Related articles](#) - [View on HTML](#)

[HTML from mendeley.com](#)

**Spatial clustering for inhomogeneous populations**  
J Lutzick - *Journal of the Royal Statistical Society. Series B* ( ...), 1990 - JSTOR  
... the moment, from all individuals at risk in 9 select at random a set of n1 "controls" and denote

their **location** by [yl ... 1990] **SPATIAL CLUSTERING ... General Rank-based Procedures** The previous procedures are all **based** on the sequence of zeros and ones determined from the case ...

[Cited by 204](#) - [Related articles](#) - [All 5 versions](#)

### **Improved anti-based clustering and sorting in a document retrieval interface**

J Handl ... Parallel Problem Solving from Nature—PPSN VII, 2002 - Springer

... the **query results** by browsing the documents, which are accessed through a mouse click on their map **location** ... with similar contents should be in close proximity, while differences in subject should be reflected by **spatial distance** ... Improved Anti-Based Clustering and Sorting 915 ...

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[\[PDF\] from ebscohost.com](#)

### **Mean shift based clustering in high dimensions: A texture classification example**

B Chazal, I Shimshoni ... Computer Vision, 2003 ... 2003 - cs.cmu.edu

... search in high dimensions for general datasets [10, 11] and for **clustering data** [9, 14]. We use the approximate nearest neighbor algorithm **based** on locality-sensitive hashing (LSH) [7] and ... mean shift iterations (5) require a neighborhood query around the current **location y**. The ...

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[\[PDF\] from cs.cmu.edu](#)

### **CHAPTER EIGHT The Moran scatterplot as an ESDA tool to assess local instability in spatial association**

L Anselin ... Spatial: analytical perspectives on GIS, 1996 - books.google.com

... lower left quadrants represent positive **spatial association**, in the sense that a **location** is surrounded ... The suggestion of **spatial clustering** that follows from a visual inspection of this map is ... This statistic is computed for a **spatial weights matrix based** on distance contiguity, using ...

[Cited by 493](#) - [Related articles](#) - [Library Search](#) - [All 3 versions](#)

### **Spatial econometrics**

L Anselin ... A companion to theoretical econometrics, 1998 - Wiley Online Library

... Typically, they are **based** on the geographic arrangement of the observations, or contiguity ... This is a full matrix, which implies that shocks at any **location** affect all other locations ... has a certain intuition, in the sense that it incorporates an explicit notion of **spatial clustering** as a ...

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[\[PDF\] from cs.cmu.edu](#)

### **Peer-to-peer spatial queries in sensor networks**

M Demetrescu ... 2003 - computer.org

... Besides the **location-based queries**, the proposed framework can be utilized for other multi-dimensional queries over ... program that constructs a hierarchical partitioning of a sensor network **based** on the ... to [n, N] (where  $N > 2^n$ ) tolerance factor in our **clustering** program, LOCI ...

[Cited by 104](#) - [Related articles](#) - [All 22 versions](#)

[\[PDF\] from psu.edu](#)

### **Plant size and clustering of manufacturing activity**

SH Swensen ... Geographical Analysis, 1996 - Wiley Online Library

... set of studies by regional scientists of industrial complexes in the 1970s and a point pattern analysis of manufacturing **location patterns** in ... Given **data** with a suitably detailed **spatial resolution**, the most powerful statistical methods for examining **clustering** are **based** on the ...

[Cited by 49](#) - [Related articles](#) - [All 2 versions](#)

### **Fine-scale mapping of disease genes with multiple mutations via spatial clustering techniques**

J Meitner, F Marjoram ... The American Journal of Human ... 2003 - Elsevier

... Furthermore, our **clustering** approach has the potential to allow us to detect the presence of multiple ... The metric is **based** upon the assertion that the difference was due to a mutation at ... Another modification would be to define a series of probabilities at each marker **location**  $p$  ...

[Cited by 85](#) - [Related articles](#) - [All 3 versions](#)

[\[HTML\] from nih.gov](#)

### **Spatial data mining: A database approach**

M Ester, HP Kriegel ... Advances in spatial databases, 1997 - Springer

... extension. The explicit **location** and extension of objects define implicit relations of **spatial** neighborhood ... objects. Step 4 is **based** on the neighborhood graphs for the special neighborhood relations, eg spatialgraph ... 4.2 Spatial Clustering Clustering ...

[Cited by 244](#) - [Related articles](#) - [All 3 versions](#)

[\[PDF\] from psu.edu](#)

### **An optimal graph theoretic approach to data clustering: Theory and its application to image segmentation**

Z Wu ... IEEE transactions on pattern analysis and machine ... 1993 - computer.org

... computed feature vectors together. Often little or no **spatial** information about the image is used. Here a new method for image segmentation is developed **based** on our **clustering** algorithm. This method effectively searches ...

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### **[PDF] Distributed clustering and local regression for knowledge discovery in multiple spatial databases**

A Lazarevic, D Petrovic ... Proceedings of 8th European ... 2000 - Citeseer

... The proposed method is shown to be computationally efficient and fairly accurate when compared to an approach where all the **data** are available at a central **location** ... Sander J., Ester M., Kriegel H.-P., Xu X.: "Density-Based Clustering in Spatial Databases: The Algorithm ...

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[\[PDF\] from psu.edu](#)

[PDF] **Algorithms and applications for spatial data mining**  
M Ester, HP Kriegel, ... - Geographic Data Mining and Knowledge ... , 2001 - Citeseer  
... traffic control or environmental studies. A spatial database contains objects which are characterized by a spatial location and/or extent ... We can support clustering algorithms by our database primitives if the clustering algorithm is based on ...  
Cited by 24 - Related articles - View as HTML - All 13 versions

**The spatial patterning of county homicide rates: An application of exploratory spatial data analysis**  
SF Messner, L Anselin, RD Baller, ... - Journal of Quantitative ... , 1999 - Springer  
... research has demonstrated convincingly that knowledge about the location of criminal ... a nonrandom geographic distribution. The present paper examines spatial clustering of homicide ... Our analyses are based on the newly developed methodology of exploratory spatial data ...  
Cited by 139 - Related articles - Full text - All 16 versions

[PDF] **A new method to measure spatial association for ecological count data**  
JN Pettit, ... - Ecscience, 2002 - rothamsted.brs.ac.uk  
... The new measure is based on a comparison of the spatial SADIE clustering index of the two sets ... coefficient between the clustering indices of the two sets. The randomization method allows ... their co-location in particular subareas of each plot ...  
Cited by 147 - Related articles - View as HTML - Full text - All 4 versions

[PDF] **Spatial data mining: progress and challenges survey paper**  
K Koperski, J Adhikary, ... - Workshop on Research Issues on Data ... , 1996 - Citeseer  
... be described using two different properties, geometric and topological. For example, geometric properties can be spatial location, area, perimeter ... As for the efficiency concern, a new algorithm, called CLARANS (Clustering large Applications based upon Randomized ...  
Cited by 185 - Related articles - View as HTML - All 13 versions

[CITATION] **Exploratory spatial data analysis and geographic information systems**  
L Anselin - New tools for spatial analysis, 1994 - Luxembourg: Eurostat  
Cited by 75 - Related articles - All 2 versions

[PDF] **Discovery of general knowledge in large spatial databases**  
W Lu, J Han, BC Ooi - Proc. For East Workshop on Geographic ... , 1993 - Citeseer  
... in raster data is represented by  $\langle(x, y), \text{intensity}\rangle$ , where  $(x, y)$  is the spatial location and intensity the nonspatial attribute value ... Different from relational data clustering, which is usually based on the concept hierarchy of each single attribute, spatial data clustering is two ...  
Cited by 124 - Related articles - View as HTML - All 16 versions

**Color image segmentation using density-based clustering**  
Q Ye, W Gao, ... - icme, 2003 - computer.org  
... Considering that an image can be regarded as a dataset in which each pixel has a spatial location and a color value, color image ... To discover the spatial connectivity of the pixels, density-based clustering is employed, which is an effective clustering method used in ...  
Cited by 43 - Related articles - Full text - All 11 versions

**Local maximum filtering for the extraction of tree locations and basal area from high spatial resolution imagery**  
M Wulder, KO Niemann, ... - Remote Sensing of ... , 2000 - Elsevier  
... The ability to directly estimate the location of trees may improve estimates of stand density, volume, basal area, and canopy closure compared to estimates based on lower ... template matching (Pollock, 1999), morphology (Barbezat and Jacot, 1999), and clustering (Culvenor et al ...  
Cited by 162 - Related articles - Full text - All 2 versions

**Spatial data management on a very large cadastral database**  
PJM Van Oosterom, CHJ Lemmen - Computers, Environment and Urban ... , 2001 - Elsevier  
... highlights some innovative developments during the design of this database, eg the Spatial Location Code for ... unique object identifiers, integration of geometric and thematic attributes in one table, spatial clustering, spatial indexing, SQL based product development ...  
Cited by 41 - Related articles - Full text - All 2 versions

**How many clusters? Which clustering method? Answers via model-based cluster analysis**  
C Fraley, ... - The computer journal, 1999 - Br Computer Soc  
... An alternative is described in this paper. 2.2. Probability models for cluster analysis In model-based clustering, it is assumed that the data are generated by a mixture of underlying probability distributions in which each component represents a different group or cluster ...  
Cited by 350 - Related articles - Full text - All 25 versions

**SPRING: integrating remote sensing and GIS by object-oriented data modelling**  
G Cinián, RCM Souza, UM Freitas, ... - Computers & graphics, 1996 - Elsevier  
... geocoding can be made by means of ground control point location, and images ... SPRING uses a segmentation algorithm which is based on regiongrowing methods [8] ... the segmentation is performed, various region classifiers can be executed: clustering, maximumlikelihood and ...  
Cited by 201 - Related articles - Full text - All 4 versions

**A unified approach to detecting spatial outliers**[\[PDF from ieeexplore\]](#)S. Shakhar, C.T. Lu, ... - *Geoinformatica*, 2003 - Springer

... **outlier-degree** of an object is determined by taking into account the **clustering** structure in ... as shown in figure 1(b). **Spatial** attributes are used to characterize **location**, neighborhood, and ... Graphical tests are **based** on the visualization of **spatial data** which highlights **spatial outliers** ...

[Cited by 28](#) - [Related articles](#) - [Full Text](#) - [All 10 versions](#)**A test for the coincident economic and spatial clustering of business enterprises**[\[PDF from geobase\]](#)E.J. Feser, ... - *Journal of Geographical Systems*, 2000 - Springer

... as an **input** to **concentration** from the **input** of **general location** advantages related to ... paper, we outline a method for accomplishing this that joins **input-output based analysis** of **economic clustering** with **statistical methods** for investigating **spatial clustering** ...

[Cited by 55](#) - [Related articles](#) - [Full Text](#) - [All 6 versions](#)**Soil-landscape modelling using fuzzy c-means clustering of attribute data derived from a Digital Elevation Model (DEM)**S. De Bruin, ... - *Geoderma*, 1998 - Elsevier

... 2. **Location** of the sample points in UTM projection ... Since all these measures are **based** on information obtained from within the **clustering** process itself, they are so-called ... Conversely, external criterion analysis is **based** on variables not used in the cluster analysis (Milligan, 1996 ...

[Cited by 28](#) - [Related articles](#) - [Full Text](#) - [All 2 versions](#)**Extracting spatial knowledge from the web**[\[PDF from ieeexplore\]](#)Y. Morimoto, M. Aono, M.E. Houle, ... - *Applications and the ...*, 2003 - [IEEE Xplore](#)

... The **clustering** method was applied to uniform random samples drawn from S, of size |S|/21 ... titles of 70 nearest web pages from the query element at which the cluster is based ... We associate the keywords with web pages that contain **location** information to create a **geospatial** ...

[Cited by 43](#) - [Related articles](#) - [All 13 versions](#)**[PDF] Forecasting rural land-use change: a comparison of regression- and spatial transition-based models**[\[PDF from calstate.edu\]](#)D.M. Theobald, ... - *Geographical and Environmental ...*, 1998 - [ncsl.colostate.edu](#)

... Actions such as **clustering** alter the footprint or **location** of development while maintaining or even ... Planning actions that modify the **location** of development can also modify the  $PD(x, 1) \dots$  In the **regression-based** model, the **spatial** linear regression results in a map of probability of ...

[Cited by 65](#) - [Related articles](#) - [Full Text](#) - [All 2 versions](#)**Methods, apparatus and data structures for providing a user interface, which exploits spatial memory to objects**M. Czerwinski, S.T. Dumais, S.E. Dziedosz, ... - *US Patent*, ... 2001 - [Google Patents](#)

... Intelligent help may be provided to the user, as visual indicators, **based** on proximity **clustering** or **based** on matching ... 00 1 - CO CD co CM CO o CO 00 o co CD O CO "PUSHED" FLAG "MOVE" FLAG "SELECT" FLAG Lu > 2 "ACTI FLA PRE-PUSH LOCATION NO LOCATI ...

[Cited by 69](#) - [Related articles](#) - [All 2 versions](#)**Exploratory spatial data analysis of the distribution of regional per capita GDP in Europe, 1980-1995**[\[PDF from bswi.gong.ac.cn\]](#)J. Gallo, ... - *Papers in regional science*, 2003 - [Wiley Online Library](#)

... are located in the European Union and the way this pattern of **location** has changed ... it cannot discriminate between a **spatial clustering** of high values and a **spatial clustering** of low ... Inference is **based** on the normal asymptotic approximation as suggested by Ord and Getis (1995 ...

[Cited by 211](#) - [Related articles](#) - [Full Text](#) - [All 18 versions](#)**Second-order analysis of space-time clustering**P.J. Diggle, A.G. Chentsov, ... - *Statistical methods in ...*, 1995 - [www.sagepub.com](#)

... For example, the **location** of a case might be taken as the principal residence of the ... Our analysis is **based** on the second-order properties of a general stationary, **spatial-temporal** ... scales, whether for estimation purposes or to construct an omnibus test of space-time **clustering** ...

[Cited by 118](#) - [Related articles](#) - [Library Search](#) - [All 8 versions](#)**Opening the black box: interactive hierarchical clustering for multivariate spatial patterns**[\[PDF from psu.edu\]](#)D. Guo, D. Pourque, ... - *Proceedings of the 10th ACM ...*, 2002 - [portal.acm.org](#)

... The input is a set of 2-D points  $V = \{v_1, v_2, \dots, v_n\}$ , where  $v_i = \langle x, y \rangle$  is a **location** in the ... [7] Estvill-Castro, V. and Lee, I., Amoeba: Hierarchical Clustering Based On Spatial Proximity Using Delaunay Diagram, 9th International Symposium on Spatial Data Handling, Beijing ...

[Cited by 28](#) - [Related articles](#) - [Full Text](#) - [All 9 versions](#)**Path based pairwise data clustering with application to texture segmentation**[\[PDF from psu.edu\]](#)B. Fischer, T. Zeller, ... - *Methods in Computer Vision and Pattern ...*, 2001 - Springer

... the resulting twelve dimensional vector of modulus values  $\{x\}$  for each image **location**  $x$  comprises ... Although  $\{x\}$  contains information about **spatial** relations of pixels in the neighborhood of  $x$ , it ... 5. Results of the novel **path based clustering** criterion on three **toy data** sets: a) arcs b) ...

[Cited by 26](#) - [Related articles](#) - [Full Text](#) - [All 12 versions](#)**Algorithm for data clustering in pattern recognition problems based on quantum mechanics**[\[PDF from ieeexplore\]](#)D. Hryn, ... - *Physical Review Letters*, 2001 - APS

... that they lie at high values (of order E). Classifying **data** points to clusters according to their topographic **location** on the 3 ... **raw data** in four dimensions, leading to misclassifications of the order of 15 instances, similar to the **clustering** quality of [4]. Distance-based QC formulation ...

[Cited by 12](#) - [Related articles](#) - [Full Text](#) - [All 15 versions](#)

### The analysis of spatial association by use of distance statistics

W Getis. - *Geographical analysis*, 1992 - Wiley Online Library

... **x** values in the vicinity of point **i** differ systematically from the mean is there the opportunity to identify significant spatial concentration of ... The statistic is general in the sense that it is **based** on all pairs of values ( $x_i, x_j$ ) such that  $i$  and  $j$  are ... No particular location  $i$  is fixed in this case. ...

[Cited by 592](#) - [Related articles](#) - [Full Text](#)

### Integrating GIS and spatial data analysis: problems and possibilities

M Goodchild. - *Environment*, 1997 - geog.oxford.edu

... in a **spatial database** errors arise in measuring both **location** and attribute properties ... a 'dragging windows' utility for exploratory analysis, particularly in large object-based **spatial data** sets (Haslett ... with others at Lancaster University, on the detection of **spatial clustering** in cancer ...

[Cited by 242](#) - [Related articles](#) - [Full Text](#) - [All 2 versions](#)

### The world in your pocket-towards a mobile cartography

T Reichenbacher. - *Proceedings of the 20th International Cartographic ...*, 2001 - Elsevier

... are many different techniques: Bayesian (probabilistic), logic based, ML techniques, **clustering**, stereotype-based ... For a start the categorisation could be **based** on the user's information requests or ... context of this **location**, checking for events happening at this **location** and finding ...

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### The spatial clustering of science and capital: Accounting for biotech firm-venture capital relationships

WW Powell, KW Kopin, JJ Bowers. - *Regional Studies*, 2002 - Taylor & Francis

... Page 3. The **Spatial Clustering** of Science and Capital 293 ... is a major research centre, the Center for Disease Control, a technology-based university, Georgia Tech, graphic concentration of the production **location**, why does the propensity for innovative activity to cluster ...

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### Density-connected sets and their application for trend detection in spatial databases

M Esler, HP Kriegel, J Sander. - *... on Knowledge Discovery and Data ...*, 1997 - aaai.org

... A differ-**ence-based** method calculates the difference of both, the ob- served influence region and the theoretical circular region, thus returning some region indicating the **location** of a possible deviation (see figure 2). An ... **Density-Based Clustering** in Spatial Databases: The ...

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### Inferring urban land use from satellite sensor images using kernel-based spatial reclassification

MJ Barnsley. - *Photogrammetric Engineering and Remote ...*, 1996 - asprs.org

... classes in a somewhat ar- bitrary and unpredictable manner, depending on the **location** of the ... by Wharton (1982a; 1982b) provides an early ex- ample of kernel-based **spatial** re-classification ... of the kernel is de- rived using an unsupervised, non-parametric **clustering** pro- cedure ...

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### Algorithms for mining distance-based outliers in large datasets

EM Knorr. - *... of the International Conference on Very Large Data ...*, 1998 - Elsevier

... It is the exceptional cases/exceptional perhaps in monetary amount, type of purchase, timeframe, **location**, or some ... indirectly through the notion of clusters, and they are developed only to optimize **clustering**, but not ... 1.2 Distance-Based Outliers and Contribu- tions of this Paper ...

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### Geonotes: Social and navigational aspects of location-based information systems

F Espinoza, P Persson, A Sandin. - *... UbiComp 2001 ...*, 2001 - Springer

... we allow the user to regulate the tradeoff between curiosity about the **spatial** annotations and ... who bought the same books that you bought, also bought this one! **Clustering** users into ... In conclusion, our proposal for a **location-based** information system is social in two respects. ...

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### Nonparametric maximum likelihood estimation of features in spatial point processes using Voronoi tessellation

D Aldred. - *Journal of the American Statistical Association*, 1997 - JSTOR

... is derived using a natural partition of the space defined by the **data** themselves: the ... The methodology is tested on simulations and compared to a model-based **clustering** technique ... INTRODUCTION The problem of contouring clusters of points belonging to a **spatial** point process ...

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### Fuzzy image clustering incorporating spatial continuity

AWC Liew, SH Leung. - *... Vision, Image, and Signal ...*, 2000 - ieeexplore.ieee.org

... For pixel at **location**  $(i, s)$ ,  $8(r, t)$ ,  $(-1, s)$  gives the Euclidean distance between feature vectors  $x$  ... We next perform colour-based image segmentation on some real colour images using our algorithm. ... The **clustering** is then done in the CIELAB space using the L, a and b colour compo ...



implementation of SWARM is **based** upon the definition of so-called Modelswarms and ... The Municipality of Nijmegen for example prefers a **clustering** of new urbanisation close to existing ...  
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# Using the fractal dimension to cluster datasets

(PDF from psu.edu)

D Batschelet ... Conference on Knowledge discovery and data ... 2000 - portal.acm.org  
 ... Then, the information kept is **not** the actual **location** of points in the boxes, but rather, the number of points in each box. ... The second one is **based** on discarding low-populated boxes. ... WaveCluster: A Multi-Resolution Clustering Approach for Very Large Spatial Databases. ...  
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# It's about time: A conceptual framework for the representation of temporal dynamics in geographic information systems

DJ Pequet - Annals of the Association of American ... 1994 - Wiley Online Library  
 ... is **object-based** in the sense that all in-formation, coordinate as well as non-spatial at-tribute information, is stored relative to specific geographic/cartographic objects, or features (roads, census tracts, etc.).\* The raster or grid **data** model, conversely, is **location-based** in the ...  
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# An approach to active spatial data mining based on statistical information

(PDF from psu.edu)

W Wang, J Yang, ... Knowledge and Data Engineering ... 2003 - ieeeexplore.ieee.org  
 ... Triggers specified in terms of changes to clusters (area, density, **location**, etc.) may be used to ...  
 WANG ET AL.: AN APPROACH TO ACTIVE SPATIAL DATA MINING BASED ON STATISTICAL ...  
 An algorithm for incremental **clustering** for mining in a **data** warehousing environment is ...  
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# A data mining approach for spatial modeling in small area load forecast

HC Wu ... Power Systems, IEEE Transactions on, 2002 - ieeeexplore.ieee.org  
 ... calculus and/or significant specific domain knowledge [1]. The forecasting of the **location** for future ...  
 B. **Data** Conversion Preference scores in the training set are computed **based** on historical ... The first step (KD1) uses a **clustering** technique to de- termine the major combinative ...  
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